

New Hanover County Natural Area Inventory

ZEKES ISLAND MARSHES AND BEACHES

Significant Natural Heritage Area

Site significance: state

Size: 2335 acres (613 in New Hanover County)

Quadrangle: Kure Beach

Ownership: N.C. Division of Coastal Management

SIGNIFICANT FEATURES: Zekes Island Marshes and Beaches contains breeding populations of three Federally and State Threatened animals: piping plover (*Charadrius melodus*), loggerhead (*Caretta caretta*), and green turtle (*Chelonia mydas*). The site also contains a population of a Federally and State Threatened plant, seabeach amaranth (*Amaranthus pumilus*). Another seven rare animal species are known from the site, plus two additional rare plants: dune bluecurls (*Trichostema* species 1) and tough bumelia (*Sideroxylon tenax*), both Federal Species of Concern. The site also contains one of the best examples of the Salt Marsh community in North Carolina, and supports a Special Animal Habitat: Gull*Tern*Skimmer Colony.

LANDSCAPE RELATIONSHIPS: This site is located at the extreme southern tip of New Hanover County and extends southward into Brunswick County, where it meets Bluff Island and East Beach natural area. It is bounded on the west by a rock jetty along Cape Fear River, on the north by Fort Fisher State Recreation Area, and on the east by the Atlantic Ocean. It includes Zekes, No Name, and North estuarine islands. The site is located at the northern end of the Bald Head/Smith Island Macrosite within the Cape Fear Megasite.

SITE DESCRIPTION: Zekes Island Marshes and Beaches is made up of barrier beach, sandy islands, tidal marshes and flats, and surrounding estuarine waters. The barrier beach and dunes provide critical habitat for the site's Federally and State Threatened plants and animals. The sandy islands support a Maritime Dry Grassland association with such plants as trailing wild bean (*Strophostyles helvula*), bitter seabeach grass (*Panicum amarum*), and dune greenbrier (*Smilax auriculata*). Scattered among these are low trees and shrubs such as live oak (*Quercus virginiana*), coastal red cedar (*Juniperus virginiana* var. *silicicola*), wax-myrtle (*Morella cerifera*), and yaupon (*Ilex vomitoria*). The very rare dune bluecurls is frequent on these sandy islands. The extensive, high quality Salt Marsh community is located on regularly flooded tidal flats. This community, one of the most biologically productive systems in nature, is strongly dominated by saltmarsh cordgrass (*Spartina alterniflora*).

The site has been designated as a Gull*Tern*Skimmer Colony because of the large breeding populations present for this group of waterbirds. Among the birds breeding in this habitat are black skimmer (*Rynchops niger*), least tern (*Sterna antillarum*), and gull-billed tern (*Sterna nilotica*), all rare in North Carolina. Estuarine waters within the site provide critical habitat for rare fish and reptiles.

MANAGEMENT AND PROTECTION: The majority of this site is owned by the state Division of Coastal Management and managed by the Coastal Reserve Program as Zekes Island Estuarine